

WHAT IS CLAIMED IS:

1. An electrosurgical electrode assembly for use in an electrosurgical handpiece comprising:

(a) an elongated tubular first member having a first end and a distal flexible extendable second end and a longitudinal axis,

(b) first and second electrically-conductive wires positioned in electrically-insulating relationship in the first member with first means connected to the first member at its first end for applying to the first and second wires a bipolar electrosurgical voltage capable of transmitting electrosurgical currents along the wires,

(c) first and second spaced exposed electrodes mounted on the side of the first member at its second end and being connected respectively to the first and second wires,

(d) wherein electrosurgical currents are generated sideways between the first and second electrodes when the electrosurgical voltage is applied to the first and second wires.

2. The electrosurgical electrode assembly as claimed in claim 1, wherein the spaced first and second electrodes are spaced apart longitudinally.

3. The electrosurgical electrode assembly as claimed in claim 2, wherein the first and second electrodes occupy only a small circumferential region of the first member.

4. The electrosurgical electrode assembly as claimed in claim 2, wherein the first and second electrodes encircle circumferentially the first member.

5. The electrosurgical electrode assembly as claimed in claim 2, wherein the first and second electrodes are nail heads protruding from the side of the first member.

6. The electrosurgical electrode assembly as claimed in claim 2, wherein the first and second electrodes are longitudinally-spaced, the first electrode covering substantially an end surface of the first tube.

7. The electrosurgical electrode assembly as claimed in claim 6, wherein the first electrodes covers substantially the whole end of the first tube.

8. The electrosurgical electrode assembly as claimed in claim 1, wherein the first and second electrodes are circumferentially spaced.

9. An electrosurgical handpiece comprising:

I) a handpiece with a handle, said handpiece comprising a gun-shaped member having a handle that when squeezed causes an inner member to be extended,

II) an electrode assembly mounted in the handle, said electrode assembly comprising:

(a) an elongated tubular first member having a first end and a distal flexible extendable second end and a longitudinal axis and connected so that when the handle is squeezed, the first member is extended outwardly,

(b) first and second electrically-conductive wires positioned in electrically-insulating relationship in the first member with first means connected to the first member at its first end for applying to the first and second wires a bipolar electrosurgical voltage capable of transmitting electrosurgical currents along the wires,

(c) first and second spaced exposed electrodes mounted on the side of the first member at its second end and being connected respectively to the first and second wires, wherein electrosurgical currents are generated between the first and second electrodes when the electrosurgical voltage is applied to the first and second wires.

10. The electrosurgical handpiece as claimed in claim 9, further comprising an irrigation duct within the first member, and apertures at the end of the first member for expelling irrigation fluid near the place where the electrosurgical currents are generated.

11. The electrosurgical handpiece as claimed in claim 9, wherein the electrosurgical voltage has a frequency in excess of 1.4 MHz.

12. The electrosurgical handpiece as claimed in claim 11, wherein the electrosurgical voltage has a frequency between 3.8 and 4 MHz.

13. The electrosurgical handpiece as claimed in claim 9, wherein the handpiece comprises an outer relatively stiff tube with a bendable end, the elongated tubular first member being mounted inside the outer tube so as to be extendable and retractable when the handle is squeezed and release.